Powering Agriculture: An Energy Grand Challenge for Development

Awards Between \$300,000 and \$1,500,000 Available to Organizations That Can Offer Market-based, Clean Energy Solutions for Agriculture - USAID invites you to share ideas to improve agricultural production and reduce hunger.

Ethiopian organizations and individuals are invited to apply for **Powering Agriculture; An Energy Grand Challenge for Development (PAEGC)**, a global funding competition focused on supporting new and sustainable approaches to accelerate the development and deployment of clean energy solutions for increasing agriculture productivity.

The Problem:

Today 1.4 billion people in the world live without access to modern energy services, severely limiting their opportunities for social and economic development. The impact of this limited energy access is particularly pronounced in the agricultural sector, where it affects every aspect of the agricultural value chain, from irrigation and harvesting to processing and storage. According to the UN Food and Agriculture Organization, 80 percent of the additional food required to feed the world in 2050 will come from agricultural intensification – the process of producing more food on the same parcel of land. Increasing access to clean energy is critical to sustainably intensifying agricultural production and meeting growing global food demand.

In many locations, farmers and agribusinesses aren't aware of the clean energy technologies that might increase productivity/profitability of their operations, and even where there is demand, few examples exist of proven business models that can link clean energy enterprises with farm communities and agribusinesses. Where technologies are available, many do not match the performance and/or price points required in emerging markets. These constraints are compounded by a lack of available credit for distributors of clean energy products and services, and for customers interested in purchasing these clean energy products.

PAEGC catalyzes resources and focuses attention on overcoming the lack of reliable and clean energy services for farmers and agribusinesses in developing countries. Without these resources, they are less able to adopt modern agricultural techniques, increase food production, engage in opportunities for value-added processing, and benefit from broad-based, environmentally-sound economic growth.

As the global population steadily increases, substantial intensification of agricultural production needs to occur. Within each stage of agriculture supply chains — input production or supply (i.e. seed, fertilizer, feed, etc.), irrigation, production (i.e. planting crops, raising livestock), storage, transport, processing (i.e. sorting, drying, grinding, packaging), wholesaling, marketing, retailing, and waste management — there are opportunities for increased integration of clean energy services.

Globally, most pathways to agricultural intensification have required significant use of fossil fuels. Such approaches result in a destabilizing linkage between food and oil prices - as the price of oil fluctuates in global markets, so do costs associated with producing food. Without reliable access to clean energy services, the global growth in energy demand within developing countries' agricultural sector will result in increased greenhouse gas (GHG) emissions, further contributing to the problem of climate change.

PAEGC is seeking solutions on how to increase clean energy access for smallholder farmers and associated value chains that maximize increased agricultural productivity. Unfortunately, significant barriers exist that hinder the integration of clean energy technologies:

- In many locations, farmers and agribusinesses lack an awareness of clean energy technologies that might increase the productivity/profitability of their operations
- Available technologies do not match the performance characteristics and/or price points required in emerging markets
- These constraints are compounded by a lack of available credit for distributors of clean energy products and services who in turn cannot provide or direct customers to end user financing
- Few examples exist of proven business models that can be replicated and/or adapted to link clean energy enterprises with farm communities and agribusinesses in relevant value chains

The Grand Challenge Model:

When USAID Administrator Dr. Rajiv Shah created the Grand Challenges for Development program, he saw it as a way to collaborate with and engage the private sector and the public to find innovative, market based solutions to the most persistent development challenges. Powering Agriculture is the third of these Grand Challenges.

Today's request for proposals acknowledges a changing world for international development. While traditional development institutions, such as USAID, have a central role to play in meeting the needs of the rural poor, Powering Agriculture showcases the critical importance and incredible value that is added through partnerships among public and private entities. USAID partnered with the Government of Sweden, Duke Energy, USDA, OPIC, and AfDB to launch PAEGC. These types of partnerships build on mutual strengths and overcome weaknesses. The PAEGC program pools more than \$20 million, with the goal of increasing clean energy access and supporting economic growth in the developing world through funding and support for market-based clean energy innovations for farmers and agri-businesses. Working together, we are ensuring that development is done more quickly and that it more effectively helps us meet more people's needs.

The Challenge:

PAEGC provides assistance to support the development, marketing, deployment and commercialization of clean energy solutions. In its first round of funding, Powering Agriculture

will offer awards of between \$300,000 and \$1,500,000 for projects that focus on one or more of the following areas: Clean Energy Demand Generation, Clean Energy Technology Innovation, and Clean Energy Business Model Development. Through your clean energy solutions, this program will result in enhanced food security and increased economic resiliency in communities throughout Ethiopia and the developing world.

To learn more about this opportunity and to find information on how to apply for funding, please visit: www.PoweringAg.org. Grant applications will be accepted from January 15, 2013 through February 6, 2013 5PM EST.